

WHAT IS CLAIMED IS:

1. A rodless slide assembly comprising:
a first longitudinally extending chamber;
a second longitudinally extending chamber located adjacent the first longitudinally extending chamber and in communication therewith;
a piston assembly disposed in the first longitudinally extending chamber and movable relative thereto; and
a slide assembly disposed in the second longitudinally extending chamber and movable relative thereto;
wherein the piston assembly is coupled to the slide assembly.
2. The rodless slide assembly of Claim 1, further comprising a longitudinally extending slot located between the first and second longitudinally extending chambers, wherein the slot provides communication between the chambers.
3. The rodless slide assembly of Claim 1, wherein a linear seal is positioned between the first and second longitudinally extending chambers.
4. The rodless slide assembly of Claim 3, wherein a piston seal is located in the first longitudinally extending chamber.
5. The rodless slide assembly of Claim 4, wherein the piston seal has a cavity that is complementarily shaped and engages a portion of the linear seal.
6. The rodless slide assembly of Claim 1, wherein the first longitudinally extending chamber receives first and second piston seals with the piston assembly located therebetween.

7. The rodless slide assembly of Claim 1, wherein the second longitudinally extending chamber further comprises a longitudinally extending channel disposed therein.

8. The rodless slide assembly of Claim 7, wherein the slide assembly further comprises a bearing member extending therefrom, the bearing member being located in the longitudinally extending channel and configured for movement therein.

9. The rodless slide assembly of Claim 8, wherein the bearing member is a bearing rail.

10. The rodless slide assembly of Claim 1, wherein a grommet is attachable to the piston assembly and couples to the slide assembly so that actuation of the piston assembly causes the slide assembly to move.

11. The rodless slide assembly of Claim 1, wherein a longitudinally extending opening is disposed through the second longitudinally extending chamber.

12. The rodless slide assembly of Claim 11, further comprising a longitudinally extending cover positioned over the opening.

13. The rodless slide assembly of Claim 12, wherein a portion of the slide assembly extends from the opening, receiving a portion of the cover and attaching to an outer saddle.

14. The rodless slide assembly of Claim 1, wherein the slide assembly comprises a bearing member extending therefrom and engaging an inner surface of the second longitudinally extending chamber.

15. The rodless slide assembly of Claim 1, wherein the slide assembly comprises a plurality of bearings, each configured to engage an inner surface of the second longitudinally extending chamber.

16. The rodless slide assembly of Claim 1, wherein the slide assembly comprises a body that is selectively expandable and contractible to adjust tolerance between a plurality of bearings and an inner surface of the second longitudinally extending chamber.

17. The rodless slide assembly of Claim 16, wherein adjustment of the slide assembly is accomplished by at least one slot and at least one fastener wherein the fastener can either expand or contract the slot to either selectively expand or contract the slide assembly.

18. A rodless slide assembly comprising:
a piston assembly;
a longitudinally extending chamber;
a slide assembly located and moveable within the longitudinally extending chamber;
wherein the piston assembly is in communication with the slide assembly; and
wherein the piston assembly is located exterior of the longitudinally extending chamber.

19. The rodless slide assembly of Claim 18, wherein the piston assembly is located in another longitudinally extending chamber.

20. The rodless slide assembly of Claim 18, wherein the slide assembly is connected to a saddle located exterior of the longitudinally extending chamber.

21. The rodless slide assembly of Claim 18, wherein the piston assembly is spaced apart from the slide assembly, wherein the slide assembly is movable in a plane that is located substantially parallel to the piston assembly.

22. The rodless slide assembly of Claim 21, wherein the slide assembly is connected to a saddle located exterior of the longitudinally extending chamber.

23. The rodless slide assembly of Claim 18, wherein the longitudinally extending chamber is located in a housing and is positioned substantially parallel to another longitudinally extending chamber that receives the piston assembly.

24. The rodless slide assembly of Claim 23, wherein the housing has a slot located therein which provides communication between the piston and slide assemblies.

25. A rodless slide assembly comprising a piston and a slide, both located within a housing, wherein the piston is actuated for reciprocal movement and the slide is attached to the piston for concurrent movement therewith, and wherein the slide and piston are located in separate chambers.

26. The rodless slide assembly of Claim 25, wherein the chambers are located substantially parallel to each other.

27. The rodless slide assembly of Claim 25, further comprising a saddle attached to the slide and located exterior of the housing.

28. A rodless slide assembly comprising: a first longitudinally extending chamber, a second longitudinally extending chamber located adjacent the first longitudinally extending chamber and having a slot located therebetween; a piston assembly located in the first longitudinally extending chamber and moveable relative thereto; a slide assembly located in the second longitudinally extending chamber and movable relative thereto; an arm located in the slot and attached to the piston assembly and to the slide assembly; wherein the second longitudinally extending chamber having a longitudinally extending opening; a carriage extending from the longitudinally extending opening; and a saddle attached to the carriage and located exterior of the second longitudinally extending chamber.

29. A rodless slide assembly comprising first and second longitudinally extending chambers wherein the first chamber comprises a powered actuation means, and the second chamber comprises a slide means wherein the slide means engages the actuation means as well as an attachment means located exterior of the rodless slide assembly.